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(54) Title: PLASMID PURIFICATION

(57) **Abstract:** The present invention relates to a method of isolating at least one plasmid from other components of a liquid, which method comprises the steps of providing a separation matrix comprised of one or more porous carriers, which carrier(s) present anion exchange groups on external surfaces as well as pore surfaces and a pore size distribution that does not allow access of plasmids to pore surfaces; contacting said matrix with the liquid to allow adsorption of the plasmids to ligands present on the separation matrix; contacting an eluent with the separation matrix to release the plasmids and recovering plasmids from a fraction of said eluent. Thus, the present method allows the plasmids to adsorb to the external surfaces of the matrix, while other components such as RNA is adsorbed onto the pore surfaces. In one embodiment, the matrix presents a DNA exclusion limit of at least about 270 base pairs; such as at least about 1,000 base pairs.



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